

What the claimed is:

1. An optical chassis pasted with plating film reflection thin plates includes:

5 a shell body, which has a hollow accommodation space, wherein a pair of opposite inside walls are defined;

plural reflection elements, which is provided inside the accommodation space of the shell body with appropriate, corresponding angles and may make appropriate reflections on the light that enters into the shell;

10 a lens set, which may focus the light reflected by the reflection elements; and

an imaging apparatus, through which the focused light may be imaged on it and be transferred into image data;

the characteristics are:

15 several inter-corresponding connection planes, formed on the two corresponding inside walls of the accommodation space of the shell body with predetermined angles and positions, provide the connection and position for the plural reflection elements. Each reflection elements are non-glass materials and thin plate structured. One side surface of the thin
20 plate is arranged with plating film of reflection material. Each reflection element in thin plate structure is directly connected and positioned on the connection plane of the shell body by a method of pasting.

2. An optical chassis pasted with plating film reflection thin plates according to claim 1, a light source provided on an appropriate position of
25 an upper side of said shell body is further included.

3. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said imaging apparatus is a charge-coupling device (CCD).

30 4. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said reflection planes are directly formed on two inside walls of said shell body by a method of plastic injection

forming to one body.

5 5. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein one side surface of said thin plate of said reflection element is arranged with plating film, while another side surface is coated with glue provided for directly pasting said thin plate onto said connection plane.

10 6. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein one side surface of said thin plate of said connection element is arranged with said plating film, while the other side surface of said thin plate is coated with glue of thermo-plastic materials, by which said thin plate can be connected on to said connection plane by the method of hot press and pasting.

15 7. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein glue is coated on said connection plane to directly paste said thin plate of said reflection element onto said connection plane.

20 8. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein the material of said thin plate may one kind of following: paper, plastic, macromolecular polymer, glass fiber, rubber, and metal sheet.

9. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said thin plate is made of flexible materials, which can make said thin plate be appropriately bent to curved-face-shaped reflection element.

25 10. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said thin plate is a narrow long rectangular shaped thin plate.

30 11. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said thin plate is a narrow long trapezoid shaped thin plate.

12. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said thin plate is a width unequal and

narrow long shaped thin plate, in which width close to center is narrower and widths close to two end edges are wider.

5 13. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said reflection elements are arranged with said thin plate of plating film can be designed and manufactured by the modularization method.

10 14. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said reflection elements are arranged with said thin plate of plating film can be manufactured by the method of batch production. Plural thin plates with plating film are formed simultaneously on a same die plate. When the assembly is proceeding for said optical chassis, just one piece of said thin plates on the die is torn off, then, pasted and positioned onto said connection plane of said shell body.

15 15. An optical chassis pasted with plating film reflection thin plates according to claim 14, wherein said separation method of said thin plate off die plate is bending breaking and tearing off.

20 16. An optical chassis pasted with plating film reflection thin plates according to claim 1, wherein said optical chassis is applied to an optical scanner.

17. An optical chassis pasted with plating film reflection thin plates includes:

a hollow shell body; and

25 plural reflection elements, which are arranged in the inside walls of the hollow shell body with appropriately corresponding angles;

the characteristics are:

30 several connection planes are formed on the inside walls of the shell body for the connection and positioning of the plural reflection elements. Each of the reflection elements is structured with thin plate of non-glass material. And, one side surface of the thin plate is arranged with plating film of reflection material. Furthermore, the thin plate with plating film is manufactured by the method of batch production. Plural thin plates

with plating film are formed simultaneously on a same die plate. When the assembly is proceeding for the optical chassis, just one piece of the thin plates on the die is torn off, then, pasted and positioned onto the connection plane of the shell body.

5 18. An optical chassis pasted with plating film reflection thin plates according to claim 17, wherein said reflection planes are directly formed on two inside walls of said shell body by a method of plastic injection forming to one body.

10 19. An optical chassis pasted with plating film reflection thin plates according to claim 17, wherein one side surface of said thin plate of said reflection element is arranged with plating film, while another side surface is coated with glue provided for directly pasting said thin plate onto said connection plane.

15 20. An optical chassis pasted with plating film reflection thin plates according to claim 17, wherein the material of said thin plate may be one kind of following: paper, plastic, macromolecular polymer, glass fiber, rubber, and metal sheet.

20 21. An optical chassis pasted with plating film reflection thin plates according to claim 17, wherein said thin plate is made of flexible materials, which can make said thin plate be appropriately bent to curved-face-shaped reflection element.

25 22. An optical chassis pasted with plating film reflection thin plates according to claim 17, wherein said reflection elements are arranged with said thin plate of plating film can be designed and manufactured by the modularization method.